

# SAFETY DATA SHEET



Date of issue/Date of revision

: 28 February 2024

Version

: 1.03

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : SIGMAGUARD CSF 585 BASE BLUE 1

**Product code** : 000001099277

**Other means of identification**

00219192; 00219194; 00310817

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Professional applications, Used by spraying.

**Use of the substance/  
mixture** : Coating.

**Uses advised against** : Product is not intended, labelled or packaged for consumer use.

### 1.3 Details of the supplier of the safety data sheet

Sigma Paints Egypt

Villa#8, street 279

New Maadi, Cairo

Egypt

Tel: 00202 516 223 797

Fax: 00202 516 38 04

**e-mail address of person  
responsible for this SDS** : PS.ACEMEA@ppg.com

**1.4 Emergency telephone  
number** : +20 2 6840902

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :




**Signal word** : Warning

Code : 000001099277

Date of issue/Date of revision : 28 February 2024

SIGMAGUARD CSF 585 BASE BLUE 1

SECTION 2: Hazards identification

|  |   |
|--|---|
| Hazard statements  | : Causes skin irritation.<br>May cause an allergic skin reaction.<br>Causes serious eye irritation.<br>Toxic to aquatic life with long lasting effects.                       |
| <u>Precautionary statements</u>  |   |
| Prevention   | : Wear protective gloves. Wear eye or face protection. Avoid release to the environment.<br>Avoid breathing vapour. Wash thoroughly after handling.                           |
| Response   | : Collect spillage.   |
| Storage  | : Not applicable.   |
| Disposal   | : Dispose of contents and container in accordance with all local, regional, national and international regulations.<br>P280, P273, P261, P264, P391, P501                     |
| Hazardous ingredients  | : bis-[4-(2,3-epoxipropoxi)phenyl]propane<br>1,6-Hexanediol, reaction products with epichlorohydrin<br>Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine |
| Supplemental label elements  | :  Contains epoxy constituents. May produce an allergic reaction.                            |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Not applicable.   |
| <u>Special packaging requirements</u>  |   |
| Containers to be fitted with child-resistant fastenings  | : Not applicable.   |
| Tactile warning of danger  | : Not applicable.   |

2.3 Other hazards

|   |   |
|---|---|
| Product meets the criteria for PBT or vPvB          | : This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| Other hazards which do not result in classification | : None known.   |

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name                                | Identifiers  | %         | Classification  | Specific Conc. Limits, M-factors and ATEs                 | Type |
|--|--|-----------|---|---|------|
| bis-[4-(2,3-epoxipropoxi)phenyl]propane                | REACH #:<br>01-2119456619-26<br>EC: 216-823-5<br>CAS: 1675-54-3<br>Index: 603-073-00-2 | ≥25 - ≤50 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 2, H411  | Skin Irrit. 2, H315: C ≥ 5%<br>Eye Irrit. 2, H319: C ≥ 5% | [1]  |
| 1,6-Hexanediol, reaction products with epichlorohydrin | REACH #:<br>01-2119463471-41<br>CAS: 933999-84-9                                       | ≥10 - ≤25 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Skin Sens. 1B, H317<br>Aquatic Chronic 3, H412 | -   | [1]  |

English (GB)

Egypt

2/13

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 3: Composition/information on ingredients

|  |   |      |  |   |     |
|--|---|------|--|---|-----|
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | REACH #:<br>01-2119979085-27<br>EC: 309-629-8<br>CAS: 100545-48-0 | <1.0 | Skin Sens. 1B, H317<br>Aquatic Chronic 3, H412<br><br>See Section 16 for the full text of the H statements declared above. | - | [1] |
|--|---|------|--|---|-----|

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type  
[1] Substance classified with a health or environmental hazard  
This mixture contains ≥ 1% of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.  
Occupational exposure limits, if available, are listed in Section 8.  
SUB codes represent substances without registered CAS Numbers.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact : Causes serious eye irritation.
- Inhalation : No known significant effects or critical hazards.
- Skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation : No specific data.
- Skin contact : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

**Code** : 000001099277

**Date of issue/Date of revision**

: 28 February 2024

SIGMAGUARD CSF 585 BASE BLUE 1

## SECTION 4: First aid measures

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon oxides  
halogenated compounds  
metal oxide/oxides

### 5.3 Advice for firefighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### 6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

**SECTION 6: Accidental release measures**

|                                 |   |
|---------------------------------|---|
| Large spill                     | : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. |
| 6.4 Reference to other sections | : See Section 1 for emergency contact information.<br>See Section 8 for information on appropriate personal protective equipment.<br>See Section 13 for additional waste treatment information.   |

**SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**7.1 Precautions for safe handling**

|  |   |
|--|---|
| Protective measures  | : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.  |
| Advice on general occupational hygiene                           | : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.   |
| 7.2 Conditions for safe storage, including any incompatibilities | : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. |

**7.3 Specific end use(s)**

See Section 1.2 for Identified uses.

**SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**8.1 Control parameters**

Occupational exposure limits

**Code** : 000001099277 **Date of issue/Date of revision** : 28 February 2024  
SIGMAGUARD CSF 585 BASE BLUE 1

| Product/ingredient name  | Exposure limit values  |
|--|--|
| Talc , not containing asbestiform fibres<br><br>titanium dioxide | <b>ACGIH TLV (United States, 1/2023).</b><br>TWA: 2 mg/m <sup>3</sup> 8 hours. Form: Respirable<br><b>Law Number 4 of 1994, Environmental Law, Annex 8 - Maximum limits for air pollutants inside workplaces (Egypt, 8/2011).</b><br><b>[titanium dioxide]</b><br>TWA: 10 mg/m <sup>3</sup> 8 hours. |

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

## 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Gloves** : butyl rubber

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** :

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

|  |  |
|--|--|
| Physical state                               | : Liquid.  |
| Colour                                       | : Blue.  |
| Odour  | : Characteristic.  |
| Odour threshold                              | : Not available.   |
| Melting point/freezing point                 | : May start to solidify at the following temperature: 8 to 12°C (46.4 to 53.6°F) This is based on data for the following ingredient: bis-[4-(2,3-epoxipropoxi)phenyl]propane. Weighted average: 3°C (37.4°F) |
| Initial boiling point and boiling range      | : >37.78°C   |
| Flammability                                 | : Not available.   |
| Upper/lower flammability or explosive limits | : Not available.   |
| Flash point                                  | : Closed cup: 130°C  |
| Auto-ignition temperature                    | : Not available.   |
| Decomposition temperature                    | : Stable under recommended storage and handling conditions (see Section 7).  |
| pH   | : Not applicable. insoluble in water.  |
| Viscosity                                    | : Kinematic (40°C): >21 mm²/s  |
| Viscosity                                    | : 60 - 100 s (ISO 6mm)   |
| Solubility(ies)                              | :  |

| Media      | Result      |
|------------|-------------|
| cold water | Not soluble |

Partition coefficient: n-octanol/ water : Not applicable.

|                 |  |                         |          |        |                         |     |        |
|-----------------|--|-------------------------|----------|--------|-------------------------|-----|--------|
| Vapour pressure | Ingredient name                          | Vapour Pressure at 20°C |          |        | Vapour pressure at 50°C |     |        |
|                 |  | mm Hg                   | kPa      | Method | mm Hg                   | kPa | Method |
|                 | bis-[4-(2,3-epoxipropoxi) phenyl]propane | <0.000075006            | <0.00001 |        |                         |     |        |

|                          |  |
|--------------------------|--|
| Evaporation rate         | : Not available.   |
| Relative density         | : 1.41   |
| Vapour density           | : Highest known value: 11.7 (Air = 1) (bis-[4-(2,3-epoxipropoxi)phenyl]propane).   |
| Explosive properties     | : The product itself is not explosive, but the formation of an explosive mixture of vapour or dust with air is possible. |
| Oxidising properties     | : Product does not present an oxidizing hazard.  |
| Particle characteristics |  |
| Median particle size     | : Not applicable.  |

9.2 Other information

No additional information.



|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 10: Stability and reactivity

|   |  |
|---|--|
| 10.1 Reactivity                         | : No specific test data related to reactivity available for this product or its ingredients.   |
| 10.2 Chemical stability                 | : The product is stable.   |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur.  |
| 10.4 Conditions to avoid                | : When exposed to high temperatures may produce hazardous decomposition products.<br>Refer to protective measures listed in sections 7 and 8.    |
| 10.5 Incompatible materials             | : Keep away from the following materials to prevent strong exothermic reactions:<br>oxidising agents, strong alkalis, strong acids.              |
| 10.6 Hazardous decomposition products   | : Depending on conditions, decomposition products may include the following materials:<br>carbon oxides halogenated compounds metal oxide/oxides |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name  | Result                          | Species            | Dose        | Exposure |
|--|---------------------------------|--------------------|-------------|----------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                                | LD50 Dermal                     | Rabbit             | 23000 mg/kg | -        |
|  | LD50 Oral                       | Rat                | 15000 mg/kg | -        |
| 1,6-Hexanediol, reaction products with epichlorohydrin                 | LD50 Dermal                     | Rat - Male, Female | >2000 mg/kg | -        |
|  | LD50 Oral                       | Rat - Male, Female | 2189 mg/kg  | -        |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | LC50 Inhalation Dusts and mists | Rat                | 5.05 mg/l   | 4 hours  |
|  | LD50 Oral                       | Rat                | >2000 mg/kg | -        |

Conclusion/Summary : There are no data available on the mixture itself.

Irritation/Corrosion

| Product/ingredient name                 | Result                             | Species | Score | Exposure | Observation |
|---|------------------------------------|---------|-------|----------|-------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Eyes - Mild irritant               | Rabbit  | -     | 24 hours | -           |
|   | Eyes - Redness of the conjunctivae | Rabbit  | 0.4   | 24 hours | -           |
|   | Skin - Oedema                      | Rabbit  | 0.5   | 4 hours  | -           |
|   | Skin - Erythema/Eschar             | Rabbit  | 0.8   | 4 hours  | -           |
|   | Skin - Mild irritant               | Rabbit  | -     | 4 hours  | -           |

Conclusion/Summary

|             |  |
|-------------|--|
| Skin        | : There are no data available on the mixture itself. |
| Eyes        | : There are no data available on the mixture itself. |
| Respiratory | : There are no data available on the mixture itself. |

Sensitisation

| Product/ingredient name  | Route of exposure | Species    | Result      |
|--|-------------------|------------|-------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                                | skin              | Mouse      | Sensitising |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | skin              | Guinea pig | Sensitising |

Conclusion/Summary



Code : 000001099277

Date of issue/Date of revision

: 28 February 2024

SIGMAGUARD CSF 585 BASE BLUE 1

## SECTION 11: Toxicological information

**Skin** : There are no data available on the mixture itself.

**Respiratory** : There are no data available on the mixture itself.

### Mutagenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Carcinogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Reproductive toxicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Teratogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

### Potential acute health effects

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Eye contact** : Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** : No specific data.

**Ingestion** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 11: Toxicological information

|   |   |
|---|---|
| General   | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity                                       | : No known significant effects or critical hazards.   |
| Mutagenicity  | : No known significant effects or critical hazards.   |
| Reproductive toxicity                                 | : No known significant effects or critical hazards.   |
| Other information                                     | : Not available.  |
| Sanding and grinding dusts may be harmful if inhaled. |   |
| 11.2 Information on other hazards                     |   |
| 11.2.1 Endocrine disrupting properties                |   |
| Not available.  |   |
| 11.2.2 Other information                              |   |
| Not available.  |   |

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name  | Result                          | Species  | Exposure |
|--|---------------------------------|--|----------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                                | Acute LC50 1.8 mg/l Fresh water | Daphnia - <i>daphnia magna</i>                 | 48 hours |
| 1,6-Hexanediol, reaction products with epichlorohydrin                 | Chronic NOEC 0.3 mg/l           | Daphnia  | 21 days  |
|  | Acute EC50 47 mg/l Fresh water  | Daphnia  | 48 hours |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | Acute LC50 30 mg/l Fresh water  | Fish   | 96 hours |
|  | Acute EC50 >100 mg/l            | Algae - <i>Pseudokirchneriella subcapitata</i> | 72 hours |
|  | Acute EC50 >10 mg/l             | Daphnia - <i>Daphnia magna</i>                 | 48 hours |
|  | Acute LC50 >10 mg/l             | Fish - <i>Oncorhynchus mykiss</i>              | 96 hours |

Conclusion/Summary : There are no data available on the mixture itself.

12.2 Persistence and degradability

| Product/ingredient name  | Test  | Result                       | Dose | Inoculum |
|--|---|------------------------------|------|----------|
| 1,6-Hexanediol, reaction products with epichlorohydrin                 | OECD 301D Ready Biodegradability - Closed Bottle Test | 47 % - Not readily - 28 days | -    | -        |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | 301D Ready Biodegradability - Closed Bottle Test      | 22 % - 28 days               | -    | -        |

Conclusion/Summary : There are no data available on the mixture itself.

| Product/ingredient name  | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane                                | -                 | -          | Not readily      |
| 1,6-Hexanediol, reaction products with epichlorohydrin                 | -                 | -          | Not readily      |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | -                 | -          | Inherent         |

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 12: Ecological information

12.3 Bioaccumulative potential

| Product/ingredient name  | LogP <sub>ow</sub> | BCF | Potential |
|--|--------------------|-----|-----------|
| 1,6-Hexanediol, reaction products with epichlorohydrin                 | 0.822              | -   | Low       |
| Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine | >5.86              | -   | High      |

12.4 Mobility in soil

|   |                  |
|---|------------------|
| Soil/water partition coefficient (K <sub>oc</sub> ) | : Not available. |
| Mobility  | : Not available. |

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

|                                |   |
|--------------------------------|---|
| Methods of disposal            | : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. |
| Hazardous waste                | : Yes.  |
| European waste catalogue (EWC) |   |

| Waste code | Waste designation   |
|------------|---|
| 08 01 11*  | waste paint and varnish containing organic solvents or other hazardous substances |

Packaging

| Methods of disposal | : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. |
|---------------------|--|
| Type of packaging   | European waste catalogue (EWC)   |
| Container           | 15 01 06<br>mixed packaging  |

|                     |   |
|---------------------|---|
| Special precautions | : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |
|---------------------|---|

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 14: Transport information

|                                 | ADR/RID   | IMDG  | IATA  |
|---------------------------------|---|---|---|
| 14.1 UN number or ID number     | UN3082  | UN3082  | UN3082  |
| 14.2 UN proper shipping name    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(bis-[4-(2,3-epoxipropoxi) phenyl]propane) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| 14.3 Transport hazard class(es) | 9   | 9   | 9   |
| 14.4 Packing group              | III   | III   | III   |
| 14.5 Environmental hazards      | Yes.  | Yes.  | Yes.  |
| Marine pollutant substances     | Not applicable.   | (bis-[4-(2,3-epoxipropoxi) phenyl]propane)          | Not applicable.                                     |

Additional information

|             |   |
|-------------|---|
| ADR/RID     | : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. |
| Tunnel code | : (-)   |
| IMDG        | : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. |
| IATA        | : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.      |

|                                   |   |
|-----------------------------------|---|
| 14.6 Special precautions for user | : <b>Transport within user’s premises:</b> always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. |
|-----------------------------------|---|

|   |                   |
|---|-------------------|
| 14.7 Transport in bulk according to IMO instruments | : Not applicable. |
|---|-------------------|

SECTION 15: Regulatory information

|  |
|--|
| 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  |
| <a href="#">EU Regulation (EC) No. 1907/2006 (REACH)</a>   |
| <a href="#">Annex XIV - List of substances subject to authorisation</a>  |
| <a href="#">Annex XIV</a>  |
| None of the components are listed.   |
| <a href="#">Substances of very high concern</a>  |
| None of the components are listed.   |
| <a href="#">Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</a> |
| : Not applicable.  |
| <a href="#">Other national and international regulations.</a>  |

|                                |                |                                |                    |
|--------------------------------|----------------|--------------------------------|--------------------|
| Code                           | : 000001099277 | Date of issue/Date of revision | : 28 February 2024 |
| SIGMAGUARD CSF 585 BASE BLUE 1 |                |                                |                    |

SECTION 15: Regulatory information

|   |   |
|---|---|
| Explosive precursors                      | : Not applicable.                                     |
| Ozone depleting substances (1005/2009/EU) | Not listed.   |
| 15.2 Chemical safety assessment           | : No Chemical Safety Assessment has been carried out. |

SECTION 16: Other information

|  |   |
|--|---|
| Indicates information that has changed from previously issued version. |   |
| Abbreviations and acronyms   | : ATE = Acute Toxicity Estimate<br>CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]<br>DNEL = Derived No Effect Level<br>EUH statement = CLP-specific Hazard statement<br>PNEC = Predicted No Effect Concentration<br>RRN = REACH Registration Number   |
| Full text of abbreviated H statements                                  | : H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H319 Causes serious eye irritation.<br>H411 Toxic to aquatic life with long lasting effects.<br>H412 Harmful to aquatic life with long lasting effects.  |
| Full text of classifications [CLP/GHS]                                 | : Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2<br>Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3<br>Eye Irrit. 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2<br>Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2<br>Skin Sens. 1 SKIN SENSITISATION - Category 1<br>Skin Sens. 1B SKIN SENSITISATION - Category 1B |
| History  |   |
| Date of issue/ Date of revision  | : 28 February 2024  |
| Date of previous issue   | : 15 December 2023  |
| Prepared by  | : EHS   |
| Version  | : 1.03  |

**Disclaimer**  
*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*